

## ABSTRACT

A method for adjustment of the relative angle of rotation between a camshaft and a crankshaft in an internal combustion engine through an electromechanical phase adjuster is provided. The invention provides a rapid and precise adjustment behavior. To that end, a deviation of the adjustment speed ( $\Delta\Omega$ ) between a desired adjustment speed ( $\Omega_{SOLL}$ ) and an actual adjustment speed ( $\Omega_{IST}$ ) is calculated from at least one measurement parameter in a second control loop cascaded below the first control loop. An output parameter is calculated dependent on the deviation of the adjustment speed ( $\Delta\Omega$ ) through an adjustment speed adjuster (26) cascaded below the angle of rotation adjuster (23), with the output parameter being used to adjust the angle of rotation ( $\Phi$ ) using an electromechanical actuator (14). The relative angle of rotation can be rapidly and precisely adjusted by adjusting the adjustment speed. A phase adjuster for controlling the relative angle of rotation is also provided.